Ι

or a structure according to formula I:

Si'

wherein R₁ has the formula II:

 R_2 and R_3 are independently $C_{(1-12)}$ alkyl, optionally, R_2 having one or two nonadjacent carbon atoms of the $C_{(1-12)}$ alkyl being replaced by an oxygen atom; and wherein:

C* is a chiral carbon atom;

n is four;

 R_4 is a naturally occurring amino acid or <u>a</u> carbohydrate-moiety attached by an oxygen atom to the chiral carbon atom C* by an ester linkage, [-Q-X-(R_7)₂] <u>-Q-X-(R_5)H</u> or -Q-X-(R_5)_m; m being two or three and X being selected from the group consisting of C, P or S; [wherein R_7 is a member independently selected from the group consisting of Group Q, hydrogen, and dimethylamino, wherein when one R_7 is dimethylamino, the other R_7 is =Q, n is 4, X is C and R_2 and R_3 are both methyl, and] wherein R_5 is a member independently selected from Group Q, and

Group Q consists of:

hydroxyl group;

=O;

substituted or unsubstituted $C_{(3-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, $C_{(1-10)}$ alkoxyl, $C_{(1-10)}$ oxoalkyl, $C_{(1-10)}$ carboxyalkyl, $C_{(1-10)}$ hydroxyalkyl, or substituted $C_{(1-2)}$ alkyl group;

-OR₆, R₆ being a substituted or unsubstituted $C_{(1-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, or $C_{(1-10)}$ oxoalkyl;

substituted or unsubstituted heterocyclic group, attached to X through an atom within the ring, having one or two rings, each ring containing from four to seven atoms, wherein the heteroatom(s) of said heterocyclic group is 1 or 2 nitrogens; and

substituted or unsubstituted carbocyclic group that is attached to X through a carbon atom within a ring, having one or two rings, each ring containing four to seven atoms, wherein the substituents of said substituted carbocyclic group are selected from the group consisting of amino, $C_{(2-6)}$ alkenyl, $C_{(1-6)}$ alkyl, $C_{(1-6)}$ alkoxyl, $C_{(1-6)}$ hydroxyalkyl, hydroxyl, $C_{(1-6)}$ oxoalkyl, azido, carboxy, cyano, $C_{(2-6)}$ mono- or di-haloalkyl, isocyano, isothiocyano, [alkylphospho, alkylphosphono, alkylsulfoxy,] imino, [alkylthio,] a chlorine atom, a bromine atom, a fluorine atom and an oxygen atom.

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6. (Four Times Amended) The compound of claim 1, wherein substituents for the substituted $C_{(1-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, $C_{(1-10)}$ alkoxyl, $C_{(1-10)}$ oxoalkyl, or heterocylic groups selected from the group consisting of amino, $C_{(2-6)}$ alkenyl, $C_{(1-6)}$ alkyl, $C_{(1-6)}$ alkyl, $C_{(1-6)}$ oxoalkyl, azido, [carboxy] carboxylic acid moiety, cyano, $C_{(1-6)}$ haloalkyl, isocyano, isothiocyano, [alkylphospho, alkylphosphono, alkylsulfoxy,] imino, alkylthio, mercaptoalkoxy, or a chlorine, bromine, fluorine and oxygen atom.

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10. (Four Times Amended) The compound of claim 1, wherein the carbocyclic [cyclic] or heterocyclic group is selected from the group consisting of benzyl, phenyl, biphenyl, cyclohexyl, cyclohexenyl, cyclopentyl, [nicotinyl,] cyclopentenyl, cyclopentanedionyl, napthlalenyl, phenolyl, quinonyl, cyclobutyl, cycloheptyl, cycloheptenyl, indanyl, indenyl, tetralinyl, α -tetralonyl, 1-indanonyl, cyclohexanedionyl, decalinyl, resorcinolyl, cyclopentanedionyl, dimethylxanthinyl, methylxanthinyl, phthalimidyl, homophthalimidyl, quinazolinonyl, [octylcarboxamidophenyl,] glutarimidyl, piperidonyl, succinimidyl, methylthyminyl, piperidinyl, dimethoxyphenyl, methyldihydrouracilyl, methyluracilyl, dihydroxybenzenyl, methylpurinyl, methylxanthinyl and dimethylxanthinyl.

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12. (Three Times Amended) The compound of claim 11, wherein the other R₅, other than =0, is [selected from the group consisting of] trimethoxy-substituted phenyl[, and phenylamino].

15°

14. (Twice Amended) The compound of claim 1, wherein said compound is

selected from:

As Cont

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15. (Four Times Amended) A pharmaceutical composition comprising a pharmaceutically acceptable excipient or carrier and a compound having the following structure:

Cont

or a structure according to formula I:

wherein R_1 has the formula Π :

$$R_4$$
 C^*H
 CH_3

 R_2 and R_3 are independently $C_{(1-12)}$ alkyl, optionally, R_2 having one or two nonadjacent carbon atoms of the $C_{(1-12)}$ alkyl being replaced by an oxygen atom; and wherein:

C* is a chiral carbon atom;

n is four;

 R_4 is a naturally occurring amino acid or <u>a</u> carbohydrate-moiety attached by an oxygen atom to the chiral carbon atom C* by an ester linkage, [-O-X-(R_7)₂] -O-X-(R_5)_m; m being two or three and X being selected from the group consisting of C, P or S; [wherein R_7 is a member independently selected from the group consisting of Group Q,

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Cont

hydrogen, and dimethylamino, wherein when one R_7 is dimethylamino, the other R_7 is =0, n is 4, X is C and R_2 and R_3 are both methyl, and] wherein R_5 is a member independently selected from Group Q, and

Group Q consists of:

hydroxyl group;

=O;

substituted or unsubstituted $C_{(3-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, $C_{(1-10)}$ alkoxyl, $C_{(1-10)}$ oxoalkyl, $C_{(1-10)}$ carboxyalkyl, $C_{(1-10)}$ hydroxyalkyl, or substituted $C_{(1-2)}$ alkyl group;

-OR₆, R₆ being a substituted or unsubstituted $C_{(1-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, or $C_{(1-10)}$ oxoalkyl;

substituted or unsubstituted heterocyclic group, attached to X through an atom within the ring, having one or two rings, each ring containing from four to seven atoms, wherein the heteroatom(s) of said heterocyclic group is 1 or 2 nitrogens; and

substituted or unsubstituted carbocyclic group that is attached to X through a carbon atom within a ring, having one or two rings, each ring containing four to seven atoms, wherein the substituents of said substituted carbocyclic group are selected from the group consisting of amino, $C_{(2-6)}$ alkenyl, $C_{(1-6)}$ alkyl, $C_{(1-6)}$ alkoxyl, $C_{(1-6)}$ hydroxyalkyl, hydroxyl, $C_{(1-6)}$ oxoalkyl, azido, carboxy, cyano, $C_{(2-6)}$ mono- or di-haloalkyl, isocyano, isothiocyano, [alkylphospho, alkylphosphono, alkylsulfoxy,] imino, [alkylthio,] a chlorine atom, a bromine atom, a fluorine atom and an oxygen atom.

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18. (Amended) The pharmaceutical composition of claim 15, wherein R_5 is [selected from the group consisting of] trimethoxy-substituted phenyl[phenolyl and benzamino].

20. (Three Times Amended) A compound having the following structure:

17 (m)

or a structure according to [of] formula I:

$$R_1$$
 R_3
 R_3
 R_2

wherein R_1 or R_2 has the formula II:

$$R_4$$
 \downarrow
 $n(H_2C)$
 C^*H
 CH_3

 R_1 or R_2 , which is other than formula II, and R_3 are independently $C_{(1-12)}$ alkyl, optionally, R_2 having one or two nonadjacent carbon atoms of the $C_{(1-12)}$ alkyl being replaced by an oxygen atom; and wherein:

C* is a chiral carbon atom;

n is four;

 R_4 is a naturally occurring amino acid or <u>a</u> carbohydrate-moiety attached by an oxygen atom to the chiral carbon atom C* by an ester linkage, [-O-X-(R_7)₂] -O-X-(R_5)H or -O-X-(R_5)_m; m being two or three and X being selected from the group consisting of C, P or S; [wherein R_7 is a member independently selected from the group consisting of Group Q, hydrogen, and dimethylamino, wherein when one R_7 is dimethylamino, the other R_7 is =O, n is 4, X is C and R_2 and R_3 are both methyl, and] wherein R_5 is a member independently selected from Group Q, and

Group Q consists of:

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hydroxyl group;

substituted or unsubstituted $C_{(3-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, $C_{(1-10)}$ alkoxyl, $C_{(1-10)}$ oxoalkyl, $C_{(1-10)}$ carboxyalkyl, $C_{(1-10)}$ hydroxyalkyl, or substituted $C_{(1-2)}$ alkyl group;

-OR₆, R₆ being a substituted or unsubstituted $C_{(1-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, or $C_{(1-10)}$ oxoalkyl;

substituted or unsubstituted heterocyclic group, attached to X through an atom within the ring, having one or two rings, each ring containing from four to seven atoms, wherein the heteroatom(s) of said heterocyclic group is 1 or 2 nitrogens; and

substituted or unsubstituted carbocyclic group that is attached to X through a carbon atom within a ring, having one or two rings, each ring containing four to seven atoms, wherein the substituents of said substituted carbocyclic group are selected from the group consisting of amino, $C_{(2-6)}$ alkenyl, $C_{(1-6)}$ alkyl, $C_{(1-6)}$ alkoxyl, $C_{(1-6)}$ hydroxyalkyl, hydroxyl, $C_{(1-6)}$ oxoalkyl, azido, carboxy, cyano, $C_{(2-6)}$ mono- or di-haloalkyl, isocyano, isothiocyano, [alkylphospho, alkylphosphono, alkylsulfoxy,] imino, [alkylthio,] a chlorine atom, a bromine atom, a fluorine atom and an oxygen atom.

21. (Amended) A compound according to claim 1, wherein R_2 and R_3 are methyl, and wherein R_6 is a

substituted or unsubstituted $C_{(1-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, or $C_{(1-10)}$ oxoalkyl; substituted or unsubstituted heterocylic group, attached to X through an atom within the ring, having one or two rings, each ring containing from four to seven atoms, and a single nitrogen as the heteroatom; or

substituted or unsubstituted carbocyclic group that is attached to X through a carbon atom within a ring, having one ring containing four to seven atoms, wherein the substituents of said substituted carbocyclic group are selected from the group consisting of amino, $C_{(2-6)}$ alkenyl, $C_{(1-6)}$ alkoxyl, $C_{(1-6)}$ hydroxyalkyl, hydroxyl, $C_{(1-6)}$ oxoalkyl, azido, carboxy, cyano, $C_{(2-6)}$ mono- or di-haloalkyl, isocyano, isothiocyano, imino, a chlorine atom, a bromine atom, a fluorine atom and an oxygen atom.

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22. (Amended) A compound according to claim 21, wherein [one] R_7 is =0 [and wherin] or wherein one R_5 is =0.

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26. (Amended) A compound according to claim 25, wherein R_5 is a member independently selected from the group consisting of [a hydrogen atom; a] <u>an</u> hydroxyl group; =O; substituted or unsubstituted $C_{(3-10)}$ alkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, $C_{(1-10)}$ alkoxyl, $C_{(1-10)}$ oxoalkyl, $C_{(1-10)}$ carboxyalkyl, $C_{(1-10)}$ hydroxyalkyl; and a substituted $C_{(1-2)}$ alkyl group.

27. (Amended) A compound according to claim $\frac{2}{5}$, wherein R_5 is [H,] OH or =0.